

Notice of Allowability

Application No.

10/619,130

Examiner

Andrea M. Valenti

Applicant(s)

ZHANG, MAO

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 15 March 2005.
2. ☒ The allowed claim(s) is/are 1,3,6 and 9.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Allowable Subject Matter

Claims 1, 3, 6, and 9 are allowed.

The following is an examiner's statement of reasons for allowance: Cited references U.S. Patent No. 4,023,954; U.S. Patent No. 6,303,175; U.S. Patent No. 5,618,574; U.S. Patent No. 3,814,057; U.S. Patent No. 6,130,084; U.S. Patent No. 6,557,487; Japanese Patent JP 62269646A; Japanese Patent JP 59085259A; Japanese Patent JP 06116073A; United Kingdom Patent GB 2110516A; U.S. Patent No. 5,985,538 and PCT WO 74478A1; New Scientist, Feedback, vol. 141, no. 1981, page 92, 26 March 1994; Mini-livestock, village development and role of BEDIM; Hardouin,; Universitaire des Sciences Agronomiques de Gembloux, Passage des Deportes, 8-5030 Gembloux, Belgium, BASE: Biotechnologie, Agronomie, Societe et Environemnt coil. 1 (2):p.9 99 abstract lp, teach that it is known to rear flies in space, that it is known to feed flies human and animal waste, and that it is known that extracts from flies are a nutritional feed for humans and animals.

The prior art of record all fails to show, and fails to make obvious, either alone and/or in combination a method for closed-loop regeneration of food for humans during a long term mission comprising: in space, freezing fly eggs in liquid nitrogen; bringing the frozen fly eggs on the long term mission; thawing some of the fly eggs in space; rearing maggots and pupa in space from the thawed fly eggs by feeding the maggots human waste and plant crop waste; preparing a powder from the maggots that have been reared and feeding the maggot powder to the humans as food.

Art Unit: 3643

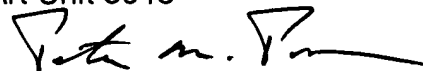
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrea M. Valenti
Patent Examiner
Art Unit 3643



Peter M. Poon
Supervisory Patent Examiner
Technology Center 3600

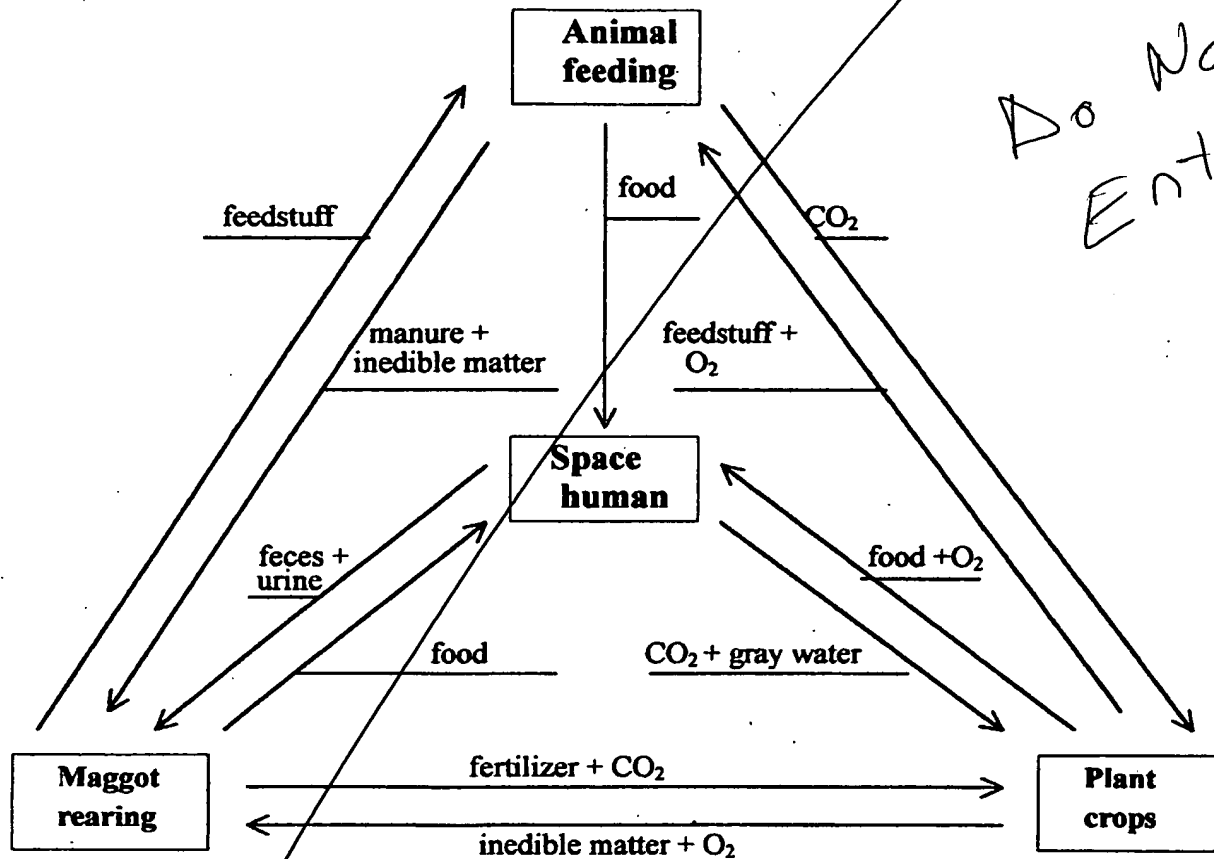
30 March 2005

3/30/05



Figure 1,

A Closed Loop System for Recycling Wastes and Food Regeneration in the Space.

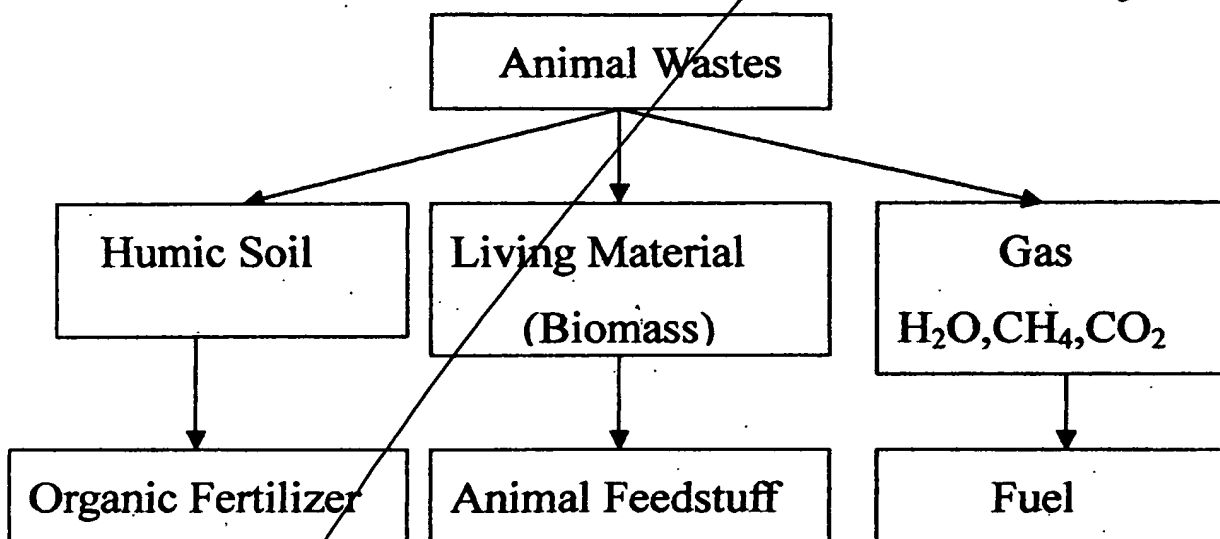


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Fig 1, (From Japanese Patent JP 6116073, Inventor: Takenaka Komuten.)

This invention shows an effective method of utilizing the animal organic wastes in a closed environment.



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